

REMARKS

Original claims 1-46 have been canceled, and new claims 47-67 have been added. A reading of the new claims on the drawings and specification is as follows.

47. A semiconductor component (**50-Figure 2A**) comprising:

a semiconductor die (**54-Figure 2B**) comprising a plurality of die contacts (**62-Figure 2B**) in a pattern (**page 3, line 22**);

a plurality of conductors (**66-Figure 2B**) on the die in electrical communication with the die contacts configured to redistribute the pattern of the die contacts (**page 10, line 29 to page 11, line 2**);

a plurality of first contacts (**bumped contacts 58-Figure 2B**) on the die in electrical communication with the conductors; and

a plurality of second contacts (**test contacts 60-Figure 2B**) on the die in electrical communication with the conductors configured for electrical contact by a test probe (**42-42C-Figures 4A-5C**), without electrical engagement of the first contacts (**page 11, line 2**).

48. The component of claim 47 wherein the first contacts comprise bumps in an area array (**page 13, line 1**).

49. The component of claim 47 further comprising an under bump metallization layer (**44-Figure 1B, page 12, line 23**) on each first contact.

50. The component of claim 47 wherein the second contacts comprise pads (**page 14, line 12**).

51. The semiconductor component of claim 47 wherein the component is contained on a wafer **(52-Figure 2)**.

52. The component of claim 47 further comprising an electrically insulating layer **(76-Figure 2B)** between the die and the conductors.

53. The component of claim 47 wherein the conductors are configured to fan out or to fan in the pattern of the die contacts **(page 12, lines 4-12)**.

54. A semiconductor component **(50-Figure 2A)** comprising:

- a semiconductor die **(54-Figure 2B)** having a face **(84-Figure 2B)** and a plurality of die contacts **(60-Figure 2B)** on the face in a pattern **(page 3, line 22)**;

- a plurality of conductors **(66-Figure 2B)** on the face in electrical communication with the die contacts configured to redistribute the pattern of the die contacts **(page 10, line 29 to page 11, line 2)**;

- an electrically insulating layer **(78-Figure 2B)** on the conductors having a plurality of openings **(80-Figure 2B)**;

- a plurality of first contacts **(bumped contacts 58-Figure 2B)** on the face in electrical communication with the conductors; and

- a plurality of second contacts **(test contacts 60-Figure 2B)** on the face in electrical communication with the conductors comprising pads aligned with the openings configured for electrical contact with a test probe **(42-42C-Figures 4A-5C)**.

55. The component of claim 54 wherein the pads comprise portions of the conductors (**page 14, line 11**).

56. The component of claim 54 wherein the component comprises a semiconductor wafer (**52-Figure 2**).

57. The semiconductor component of claim 54 wherein the first contacts comprise balls in a ball grid array and each ball of the ball grid array is in electrical communication with a second contact (**page 12, line 34**).

58. A semiconductor component comprising:

a semiconductor wafer (**52-Figure 2**);

a plurality of components (**50-Figure 2**) on the wafer comprising a plurality of die contacts (**62-Figure 2B**);

a redistribution circuit (**page 12, line 16**) on the wafer comprising a plurality of conductors (**66-Figure 2B**) in electrical communication with the die contacts;

a plurality of test contacts (**60-Figure 2B**) on the wafer in electrical communication with the conductors; and

a plurality of terminal contacts (**bumped contacts 58-Figure 2B**) on the wafer in electrical communication with the conductors;

the test contacts configured for electrical contact by a test probe without interference from the terminal contacts (**page 8, line 1**), each test contact in electrical communication with a terminal contact.

59. The component of claim 58 wherein the terminal contacts comprise under bump metallization layers (**44-Figure 1B, page 12, line 23**) and solder bumps.

60. The component of claim 58 further comprising an electrically insulating layer (**78-Figure 2B**) on the redistribution layer having a plurality of openings (**80-Figure 2B**) aligned with the test contacts.

61. The component of claim 58 wherein the test contacts comprise portions of the conductors (**page 14, line 11**).

62. The component of claim 58 wherein the test probe comprises a needle probe, a buckle beam probe, a spring segment probe or a silicon probe (**42-42C-Figures 4A-5C**).

63. A semiconductor component (**50-Figure 2A**) comprising:

- a semiconductor die (**54-Figure 2B**) comprising a plurality of die contacts (**62-Figure 2B**) in a pattern (**page 3, line 22**);

- a plurality of redistribution conductors (**66-Figure 2B**) on the die in electrical communication with the die contacts;

- a plurality of bumped contacts (**58-Figure 2B**) on the die in electrical communication with the conductors; and

- a plurality of test contacts (**60-Figure 2B**) on the die in electrical communication with the conductors, each test contact configured for electrical contact by a test probe without interference from the bumped contacts (**page 8, line 1**).

64. The component of claim 63 wherein the die is contained on a semiconductor wafer (**52-Figure 2**) containing a plurality of dice substantially similar to the die.

65. The component of claim 63 wherein the bumped contacts comprise solder balls and under bump metallization layers in a grid array (**44-Figure 1B, page 12, line 23**).

66. The component of claim 63 wherein the test contacts comprise portions of the redistribution conductors (**page 14, line 11**).

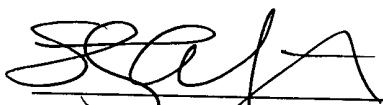
67. The component of claim 63 wherein the test contacts comprise separate pads (**page 14, line 12**).

Conclusion

Favorable consideration and allowance of claims 47-67 is respectfully requested. An Information Disclosure Statement is being filed concurrently with this Preliminary Amendment. Should any issues arise that will advance this case to allowance, the Examiner is asked to contact the undersigned by telephone.

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Respectfully submitted:



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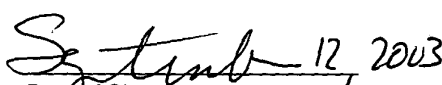
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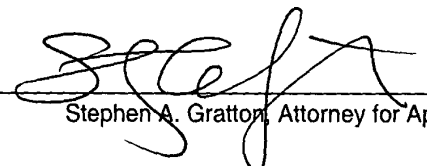
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